

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/801,221

Filing Date: 3/7/2001

Title: Human Cord Blood as a Source of Neural Tissue for Repair of the Brain and Spinal Cord

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IN THE CLAIMS

Please cancel claims 1-86 without prejudice or disclaimer, and amend or cancel the claims as follows:

The currently pending and amended claims are below. Please amend the claims following wherein deleted material is indicated by strikethrough and wherein the added matter is shown by underlining.

Claims 1-86 (cancelled)

87. (currently amended) A method of producing an isolated, differentiated, mononuclear cell from human umbilical cord blood, comprising:

- (a) obtaining a sample of mononuclear cells from said umbilical cord blood; and
- (b) growing said progenitor cells ~~mononuclear cells from step (a)~~ in a serum-free medium consisting of EGF, bFGF, pokeweed mitogen, Ara-C or a combination thereof; and
- (c) culturing the cells of step (b) in a culture medium containing an effective amount of a differentiation agent for a period sufficient to differentiate the mononuclear progenitor cells to a cell of interest, wherein the differentiation agent, comprises retinoic acid and another agent selected from the group BDNF, NGF, and GDNF,

wherein the cell exhibits both an increase in the expression of genes associated with neurogenesis and a decrease in the expression of genes associated with hematopoiesis in comparison to an umbilical cord blood cell that has not been cultured in the presence of the differentiation agent.

Claims 88 and 89 (canceled)

90. (currently amended) The method of claim 87, wherein retinoic acid is selected from the group consisting of 9-cis retinoic acid, all transretinoic acid and a mixture thereof.

Claims 91, 92 and 93 (canceled)

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94. (currently amended) The method of claim 87 93, wherein the progenitor cells are isolated from the mononuclear cells using a magnetic cell separator to separate out cells expressing a particular CD marker.

95. (previously amended) The method of claim 94, wherein the progenitor cells do not express CD34.

Claims 96-123 (canceled)